OPERATOR'S MANUAL

Boomer[™] 20

PIN LSM0B20RxHLA10001 and above

Boomer[™] 25

PIN LSM0B25RxHLA10001 and above

Stage IIIA

With Hydrostatic Transmission (HST) and Mechanical Transmission Compact Tractor



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1 - GENERAL INFORMATION

Note to the owner

Introduction

Thank you for purchasing this NEW HOLLAND product

All of us here at NEW HOLLAND welcome you as an appreciated and valued customer. We trust that the design of this machine will fulfill your needs and expectations in performance, service, and providing you with many years of safe and satisfying performance.

You have purchased a dependable machine and by properly maintaining, servicing, and operating this machine you can expect to receive the performance and long service built into this machine.

Operator's manual

Please have all operators read this manual carefully and keep this manual available for ready reference. Read this manual to make sure that you have a complete understanding of how to operate this machine safely, correctly, and for the most effective performance of the machine.

NOTE: This operator's manual may be available in other languages; see your NEW HOLLAND dealer for ordering.

This manual contains important information concerning the adjustment and maintenance of your new equipment.

NOTE: Some images of the machine in this manual may differ slightly in some detail. Any variations will be similar enough for you to understand the information or instructions.

Throughout this operator's manual, references to the right-hand and left-hand sides of the machine are determined by facing the forward operating direction of travel.



This is the safety alert symbol. The safety alert symbol alerts you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible death or injury.

A WARNING

Illustrations in this manual may show protective shielding open or removed to better illustrate a particular feature or adjustment.

Replace all shields before operating the machine.

Failure to comply could result in death or serious injury.

W0012A

Your NEW HOLLAND dealer and service

Your NEW HOLLAND dealer has performed a pre-delivery setup, inspection, and testing to make sure that your machine operates at its best performance level.

Your NEW HOLLAND dealer will instruct you in the general operation of your new equipment. (Refer to the 'Delivery Report' at the back of this manual.) Your dealer's staff of factory-trained service technicians will be glad to answer any questions that may arise regarding the operation of your machine.

Your NEW HOLLAND dealer carries a complete line of genuine NEW HOLLAND service parts. These parts are manufactured and carefully inspected to ensure high quality and accurate fitting of any necessary replacement parts. Be prepared to give your dealer the model and product identification number of your new equipment when ordering parts. Locate these numbers now and record them below. Refer to the 'General Information' section of this manual for the location of the model and product identification numbers of your machine.

1 - GENERAL INFORMATION

PLEASE RECORD THE FOLLOWING INFORM Model	ATION
Product Identification Number (PIN)	
Date Purchased	
Engine Model (As Applicable)	
Engine PIN (As Applicable)	

EC Declaration of Conformity

The manufacturer delivers the machine with a document called "EC Declaration of Conformity" which guarantees that the machine complies with the European Machinery Safety Directives. This document will usually be found on the machine when the machine is originally supplied to you. If not, it should be obtained from your dealer. The owner must carefully preserve this document to be able to present it to Safety Inspection Authorities when requested. The document as well as the operator's manual should also stay with the machine if it is traded again.

ATTENTION: The engine and fuel system on your machine is designed and built to government emission standards. Tampering by dealer, customers, operators, and end users is strictly prohibited by law. Failure to comply could result in government fines, rework charges, invalid warranty, legal action, and possible confiscation of the machine until rework to original condition is completed. Engine service and/or repairs must be done by a certified technician only!

Improvements

CNH Industrial America LLC is continually striving to improve its products. We reserve the right to make improvements or changes when improvements or changes become practical and possible to do so, without incurring any obligation to make changes or additions to the equipment sold previously.

Intended use

A WARNING

Roll-over hazard!

Always pull from the drawbar. DO NOT attach chains or ropes to the Roll Over Protective Structure (ROPS) for pulling purposes, as the machine could tip over. When driving through door openings or under low overhead objects, make sure there is sufficient clearance for the ROPS.

Failure to comply could result in death or serious injury.

W0463A

Your tractor is designed and made to pull, to carry, and to power a variety of mounted or towed equipment, although within some physical limits. The working speed and performance may depend on a number of various parameters, such as weather and terrain conditions. Though the tractor is designed to perform in combination with a variety of equipment in most crops and conditions, there may be a number of combinations of above parameters, for which there is severe degradation of performance of the tractor and/or its mounted or trailed equipment. If you notice degradation of performance, contact your dealer for assistance. He may have useful information for improvements, or a kit may be available to enhance the performance.

- Do not use the tractor for another purpose than intended by the manufacturer and outlined in this manual.
- Do not use the tractor beyond its limits of terrain gradient and stability as outlined further in this manual. Using the tractor beyond these limits may result in roll-over or tip-over. Observe the recommendations in this manual.
- Use only approved accessories and attachments that are designed for your machine. Consult your dealer on changes, additions or modifications that may be required for your machine. Do not make any unauthorized modifications to your machine.
- Do not use the tractor on higher speeds than allowed by the load and the environment. A wet surface or other low
 adherence conditions may increase the braking distance or result in vehicle instability. Always adapt your traveling
 speed according to the load of the vehicle and the characteristics of the road.
- Do not use the tractor near or on soft verges of canals and brooks or banks and verges that are undermined by rodents. The tractor may sink sideways and roll-over.
- Do not use the tractor on brittle bridge heads and poor bridge floors. These constructions may collapse and cause roll-over of the tractor. Always check out the condition and carrying capacity of bridges and ramps prior to engage.
- Do not use the tractor without wearing the seat restraint system during activities where roll-over or tip-over hazards
 exist. The Roll Over Protection Structure (ROPS) cab or ROPS structure will only be fully effective when the driver
 remains attached to his seat.
- Do not use equipment mounted on the tractor which is not correctly matching and firmly fixed. Such equipment may
 increase the risk for roll-over and hit the tractor when coming loose. Ensure that the dimensions of the three-point
 linkage interface of both the tractor and the equipment are matching according to the categories defined in ISO
 730. Ensure that the dimensions and speed of the Power Take-Off (PTO) shaft on the tractors are matching those
 of the equipment.
- Do not use the tractor in combination with equipment, without having consulted the specific operator's manual provided with the equipment. The tractor is a universal tool to carry, tow, and drive a variety of equipment. This manual alone cannot provide you with all the information required for the safe operation of the combination.
- Do not use the tractor beyond its limits of dynamic stability. High speed, abrupt maneuvers, and fast and short cornering will increase the risk of roll-over.
- Do not use the tractor for pulling work, in cases where you do not know whether the load will yield, for instance when pulling stumps. The tractor may flip over when the stump is not yielding.
- Be cautious that the center of gravity of the tractor may increase when loads on the front-end loader or the threepoint linkage are raised. In these conditions, the tractor may roll-over earlier than expected.
- Do not step down from the tractor without shutting down the PTO, shifting the transmission to park or neutral and applying the park brake, unless continued PTO operation is required for some equipment, such as pumps or wood chippers. The latter equipment may have an emergency stop device on the equipment itself, as human intervention is needed during operation. But other equipment, engaged and driven by the tractor will have no means to stop the power transmission, other than the PTO clutch of the tractor.
- You shall take the necessary precautions to always be aware of the possible presence of bystanders, certainly when
 maneuvering in confined areas, such as the farm yard and sheds. Keep people away from the tractor during work;
 ask bystanders to leave the field. There is not only the risk to be overrun by the tractor, but objects ejected by some

1 - GENERAL INFORMATION

equipment mounted on the tractor, such as a rotary mower, may cause harm. Stones may be thrown further than the mowed crop. Pay the necessary attention while operating next to public roads or footpaths. Thrown objects can get projected outside the field and hit unprotected people like bikers or pedestrians. Wait to cut the edge of the field till it is clear of bystanders.

- Do not allow riders on the tractor; do not allow people standing on the access way or step to the cab when the tractor is moving. Your view to the left will be obstructed and a rider risks to fall from the tractor during unforeseen or abrupt movements.
- Always stay clear from implements operating area and especially do not stand between tractor and trailed vehicle
 either three-point linkage when operating lift controls; ensure no bystanders are near these operating areas.

- Your tractor may be equipped with a number of sensors to control safety functions. Tripping these sensors will result in a safe operation mode. Do not attempt to bypass any function on the tractor. You will be exposed to serious hazards, and moreover, the behavior of the tractor may become unpredictable.
- A tractor has only one operator station and is a one man operated vehicle. Other people on or around the tractor during normal operation are not allowed.
- All persons who will be operating this machine shall possess a valid local vehicle operating permit and/or other applicable local age work permits.
- · The machine is designed and produced exclusively for agricultural use.
- The machine is not designed for light/heavy forestry applications; usage is prohibited for forestry applications.
- All other use will be considered to be contrary to the use specified by CNH INDUSTRIAL AMERICA LLC, who
 cannot be held liable for damage to property or the machine, or for personal injuries which may result.
- Persons who risk improper use will therefore assume the responsibility for any consequences arising from such use.
- Compliance with the instructions for use, maintenance and repairs described in this manual, are the essential preconditions for the use specified by CNH INDUSTRIAL AMERICA LLC.
- The machine must only be used, serviced, or repaired by personnel trained in the relevant working methods and safety regulations and who have been authorized to work on the machine.
- The engine and fuel system on your machine is designed and built to government emissions standards. Tampering
 by dealer, customers, operators and users is strictly prohibited by law. Failure to comply could result in government
 fines, rework charges, invalid warranty, legal action and possible confiscation of the machine until rework to original
 condition is completed. Engine service and/or repairs must be done by a certified technician only!
- The user must also observe the rules concerning general safety and accident prevention, including the Highway Code when driving on public highways.
- Any arbitrary modifications made to this machine will release CNH INDUSTRIAL AMERICA LLC from any liability resulting from damage or injury.
- CNH INDUSTRIAL AMERICA LLC and all its distribution organizations, inclusive of, but not restricted to, national, regional, or local distributors, cannot be held liable for damage resulting from the malfunction of parts and/or components not approved by CNH INDUSTRIAL AMERICA LLC.
- Under no circumstances will a guarantee be issued for products made or sold by CNH INDUSTRIAL AMERICA LLC that are damaged as a result of the malfunction of parts and/or components not approved by CNH INDUSTRIAL AMERICA LLC.

Electro-Magnetic Compatibility (EMC)

This machine complies strictly with the European Regulations on electro-magnetic emissions. However, interference may arise as a result of add-on equipment which may not necessarily meet the required standards. As such interference can result in serious malfunction of the unit and/or create unsafe situations, you must observe the following:

- Ensure that each piece of non- NEW HOLLAND equipment fitted to the machine bears the CE mark.
- The maximum power of emission equipment (radio, telephones, etc.) must not exceed the limits imposed by the national authorities of the country where you use the machine.
- The electro-magnetic field generated by the add-on system should not exceed 24 V/m at any time and at any location in the proximity of electronic components.

Failure to comply with these rules will render the NEW HOLLAND warranty null and void.

Manual scope and required training level

Introduction to this manual

This manual gives information about the use of your NEW HOLLAND machine as intended and under the conditions foreseen by NEW HOLLAND during normal operation, routine service, and maintenance.

This manual does not contain all the information that relates to periodic service, conversions, and repairs that only trained service personnel can perform. Some of these activities may require appropriate facilities, technical skills, and/or tools that NEW HOLLAND does not supply with the machine.

The manual contains the chapters as shown on the Contents pages. See the Index at the end of this manual to locate specific items about your NEW HOLLAND machine.

Normal operation

Normal operation consists of the use of this machine for the purpose NEW HOLLAND intends by an operator that:

- Is familiar with the machine and any mounted equipment or towed equipment
- Complies with the information on operation and safe practices as specified by NEW HOLLAND in this manual and by the signs on the machine

Normal operation includes:

- · Preparation and storage of the machine
- · Addition and removal of ballast
- Connection and disconnection of mounted equipment and/or towed equipment
- Adjustment and configuration of the machine and equipment for the specific conditions of the job site, field, and/or crop
- Movement of components into and out of working positions

Routine service and maintenance

Routine service and maintenance consists of the daily activities necessary to maintain the proper machine function. The operator must:

- · Be familiar with the machine characteristics
- Comply with the information on routine service and safe practices as specified by NEW HOLLAND in this manual and by the signs on the machine

Routine service can include:

- Fueling
- Cleaning
- Washing
- Topping up fluid levels

- Greasing
- · Replacing consumable items such as light bulbs

Periodic service, conversions, and repairs

Periodic service consists of activities that are necessary to maintain the expected life of the NEW HOLLAND machine. These activities have defined intervals.

Trained service personnel familiar with the machine characteristics must perform these activities at the defined intervals. Trained service personnel must comply with the information on periodic service and safe practices as partly specified by NEW HOLLAND in this manual and/or other company literature.

Periodic service includes:

- Oil change service for the engine, hydraulic circuits, or transmission
- Periodic exchange of other substances or components as required

Conversion activities rebuild the NEW HOLLAND machine in a configuration that is appropriate for a specific job site, crop, and/or soil conditions (e.g., installation of dual wheels). Conversion activities must be done:

- By trained service personnel familiar with the machine characteristics
- By trained service personnel that comply with the information on conversion as partly specified by NEW HOLLAND in this manual, assembly instructions, and/or other company literature

Repair activities restore proper function to a NEW HOL-LAND machine after a failure or degradation of performance. Dismantling activities occur during the scrapping and/or dismantling of the machine.

Trained service personnel familiar with the machine characteristics must perform these activities. Trained service personnel must comply with the information for repair as specified by NEW HOLLAND in the service manual.

Before you operate

Read this manual before you start the engine or operate this NEW HOLLAND machine. Contact your NEW HOLLAND dealer if:

- You do not understand any information in this manual
- · You need more information
- · You need assistance

All persons training to operate, or who will operate this NEW HOLLAND machine should be old enough to possess a valid local vehicle operating permit (or meet other applicable local age requirements). These persons must

demonstrate the ability to operate and service the NEW HOLLAND machine in a correct and safe manner.	

Metric and Imperial units abbreviations

Typical applications	Metric unit		Imperial unit	
	Name	Symbol	Name	Symbol
		Ī		•
Area (Land area)				
	hectare	ha	acre	ac
	square meter	m²	square foot	ft²
			square inch	in²
	square millimeter	mm²	square inch	in²
Electricity				
	ampere	Α	ampere	Α
	volt	V	volt	V
	microfarad	μF	microfarad	μF
	ohm	Ω	ohm	Ω
orce	0	32	0	32
0.00	kilonewton	kN	pound	lb
	newton	N	pound	lb
orce per length	HOWIOH	14	pound	10
or so per length	newton per meter	N/m	pound per foot	lb/ft
	newton per meter	19/111	pound per inch	lb/in
roguency			pound per mon	10/111
Frequency	magabarta	MU	magabartz	MU
	megahertz	MHz	megahertz	MHz
	kilohertz	kHz	kilohertz	kHz
	hertz	Hz	hertz	Hz
requency - Rotational		, .		, , ,
	revolution per minute	r/min	revolution per minute	r/min ^a
		rpm		rpm
_ength	T			
	kilometer	km	mile	<u>mi</u>
	meter	m	foot	ft
	centimeter	cm	inch	in
	millimeter	mm	inch	in
	micrometer	μm		
Mass				
	kilogram	kg	pound	lb
	gram	g	ounce	OZ
	milligram	mg		
Mass per mass				
	milligram per kilogram	mg/ kg	parts per million	ppm
Power				
	kilowatt	kW	horsepower	Нр
	watt	W	Btu per hour	Btu/hr
			Btu per minute	Btu/min
Pressure or stress (Force	per area)			
	kilopascal	kPa	pound per square inch	psi
			inch of mercury	inHg
	pascal	Pa	inch of water	inH2O
	megapascal	MPa	pound per square inch	psi
	millibar	mbar	Promise Para addance mail	۲۰.
		iiioai		

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